

Green/Duwamish and Central Puget Sound Watersheds 2011 Three-Year Work Plan

Watershed Questions to Answer for Three-Year Work Programs

What are the actions and/or suites of actions needed for the next three years to implement your salmon recovery chapter as part of the regional recovery effort?

- ① Policy MS-1 in the WRIA 9 habitat plan recommends distributing funding to 40% in the transition zone, 30% for rearing habitat, and 30% for spawning habitats. Rearing habitat is provided in the Middle Green River, Lower Green River, Duwamish River and Marine Nearshore. Spawning habitat is provided in the Middle Green River and upper Lower Green River.
- ① Efforts in the transition zone have focused on Duwamish Gardens restoration design at Rivermile 6.9 This project complements the North Wind's Weir project located downstream. In addition, a revegetation project is proposed for King Conservation District funding in 2011 for \$150,000 of invasive plant removal and native plantings in the riparian zone along the Green River within the transition zone. The goal of the revegetation is to improve stream shading and for food and shelter for macroinvertebrates which then become a food source for juvenile salmonids.
- ① The goal for the Duwamish sub-watershed by the end of year 5 (2010) is restoration of 10 acres of shallow water habitat. The combined restoration of North Wind's Weir and proposed work at Duwamish Gardens will not still meet this intended goal. The difficulty and expense of acquiring property in the Duwamish is proving delay restoration efforts. One way that this has been addressed has been to fund a landowner willingness outreach in this area using 2007 Puget Sound Acquisition and Restoration Capacity Funding. Several landowners in the area have expressed an interest in further discussions however, the funding for acquisitions is currently not available.
- ① Projects within the Lower Green include the Mill Creek (Wetland 5K), Mill Creek – Kent, Riverview Park, Downey Farmstead, and Rosso/Teufel Nursery. These projects, located within a reach of the Lower Green, will create a combined benefit when constructed. Riverview Park is expected to go to construction in partnership with the US Army Corps of Engineers in late 2011. Mill Creek (Kent), Downey Farmstead, and Mill Creek (Wetland 5K) are in the design phase. Rosso/Teufel Nursery has recently been acquired by the King County Flood Control District and will be seeking funding for design in 2012.
- ① Major accomplishments in the nearshore environment include the Vashon-Maury Gravel Pit acquisition, Piner Point Creosote Bulkhead Removal, and Beaconsfield on the Sound Acquisitions. The Point Heyer Drift Cell Preservation project has been focusing efforts on the northern portion of the drift cell and the project sponsor has received over \$2 million in local funding towards these efforts.

- ④ Four projects currently being designed and constructed through the King County Flood Control Zone District (KCFCZD) are included, although the project is completely funded through the district. Coordination with WRIA 9 staff is ensuring that the projects include benefits to salmon.
- ④ The WRIA 9 Implementation Technical Committee has completed analysis and is currently writing a report on adaptive managements. In addition, the goal is to develop a strategy for monitoring project effectiveness for the mainstem river and nearshore projects. Once this strategy is reviewed and adopted by the Implementation Technical Committee and Forum, monitoring will be coordinated with other organizations and funding pursued. Currently, \$123,000 has been set aside for King Conservation District funding towards studies in the Lower Green River to assist with project design.

What is the status of actions underway per your recovery plan chapter? Is this on pace with the goals of your recovery plan?

We are behind our 5-year benchmark for implementing transition zone projects. This is primarily due to: lack of funding, property expense and availability, and inability to compete against private sector offers. Otherwise, efforts have made and are making progress on main stem levee setback projects, and marine nearshore acquisition and restoration projects. Major projects in the upper watershed sponsored by Tacoma Public Utilities (TPU) and the Army Corp of Engineers (ACOE) are also making progress.

What is the general status of implementation towards your habitat restoration, habitat protection, harvest management, and hatchery management goals? Progress can be tracked in terms of 'not started, little progress, some progress or complete' or in more detail if you chose.

Habitat Restoration and Protection

We have adopted a project prioritization and sequencing methodology that was used to evaluate all of the WRIA 9 priority projects. The highest priority projects from this effort will be the focus of future restoration and acquisition efforts. As current projects on the 3-Year Workplan are completed, this prioritized list is being used to draw projects for addition to the workplan. An example is the Porter Levee Setback Design project which is proposed for the 2011 SRFB funding. This project is part of the Middle Green River Reach project; this project is the highest priority within the Middle Green River for both WRIA 9 and King County. The WRIA 9 prioritization methodology has been posted on Sharepoint on the WRIA9 site in order to make it accessible to the SRFB Review Panel Members, RCO staff, and other interested individuals.

H-Integration Status in WRIA 9

The WRIA 9 Forum of Local Governments approved the creation of an Implementation Technical Committee (ITC) in January 2007 and the ITC has recently begun meeting again following a year-long hiatus. Importantly, the ITC includes representatives from both co-managers (Washington State Department of Fish and Wildlife and the Muckleshoot Indian Tribe), as well Tacoma Public Utilities. All four "H's" are therefore represented at the WRIA 9 table for the first time since work began on developing an ecosystem approach to recovering Chinook salmon in the Green-Duwamish system. A sub group of the ITC has been engaged since October 2007 in addressing H-integration, specifically the "6-Steps" and the H-integration tables. At this point (May 2009) drafts of the first 3 steps of H-integration have been completed for WRIA 9. A

significant ITC Work Program task for 2010 is developing an H-integration strategy for WRIA 9. Consistent with the Puget Sound regional H-integration approach, WRIA 9 will address goals, objectives, and steps for advancing H-integration as follows:

Goals of H-Integration Process

- Develop integrated strategies and suites of actions among the H-sectors that are consistent with predictions of moving salmon populations towards short, moderate, and long-term recovery goals
- Help decision-makers clearly see the interaction and cumulative effects of actions among the H-sectors

Six Steps in Advancing H-Integration...

We are following the six step H-integration process and are almost complete with the fifth step of documenting the rationale, implementation steps and expected outcomes. This step is expected to be completed in December 2010 when the WRIA 9 Implementation Technical Committee. Step 6, building and implementing a verification, effectiveness and accountability system is dependent upon additional funding.

What are the top implementation priorities in your recovery plan in terms of specific actions or theme/suites of actions? How are these top priorities being sequenced in the next three years? What do you need to be successful in implementing these priorities?

- ① The top implementation priorities in our recovery plan are focusing our efforts at the appropriate ecological scale. For the riverine environment, we are attempting to coordinate efforts at a larger scale in order to work at a scale to improve the habitat conditions. In the nearshore environment, the drift cell is being used as the appropriate unit for work.
- ② We are working with project sponsors to identify projects that are within our priority project list and then assisting them with developing a funding strategy so that the appropriate grants can be pursued. This ensures that projects move rapidly towards completion and do not risk losing existing grants while the required match is being sought.

Do these top priorities reflect a change in any way from the previous three-year work program? Have there been any significant changes in the strategy or approach for salmon recovery in your watershed? If so, how and why?

- ① Our focus has changed slightly based upon the project prioritization process by the Implementation Technical Committee in winter 2008. As currently active projects are completed, projects that rated high in the process will be added to future workplans.
- ② Four projects currently being designed and constructed through the King County Flood Control Zone District are included, although the project is completely funded through the district. Coordination with WRIA 9 staff is ensuring that the projects include benefits to salmon.

- ① Recent flood events and concerns about Howard Hansen dam have accelerated levee setback and repair projects, particularly within Auburn, Kent, Renton and Tukwila. The repair of levees and removal of all vegetation on the levees is proposed to be mitigated by the planting of vegetation elsewhere in the sub-watershed. However, this results in a net decline of riparian vegetation and reduced quality of habitat.
- ① King County policies regarding salmon restoration projects in the Agricultural Production Districts is impeding restoration opportunities in the Lower and Middle Green. Unless these issues can be resolved, the Habitat Plan goals for restoring off-channel habitat and levee setbacks will not be met.

What is the status or trends of habitat and salmon populations in your watershed?

Based upon WDFW adult return-estimates of the Green River (Duwamish) Chinook spawning population, the recent total escapement appears to be consistent with estimates dating back to 1986. The total escapement for recent years is estimated to be 4,089 in 2005, 10,157 in 2006, and 7,186 in 2007. The range from 1986 to present is 1,840 (1982) to 21,402 (2001). See: http://wdfw.wa.gov/webmaps/salmonscape/sasi/full_stock_rpts/1160.pdf.

Are there new challenges associated with implementing salmon recovery actions that need additional support? If so, what are they?

- ① The continuing challenge of the lack of funding and capacity, for both the lead entity and project sponsors, continues to limit salmon habitat recovery efforts in the region. In addition, there is very limited funding for monitoring efforts, which is the key to adaptive management.
- ① Resolving the conflict with constructing restoration projects within agricultural areas is not unique to the Green River and this issue should be addressed state-wide.
- ① In addition, the increased design criteria for levee construction and requirement for vegetation removal by the Army Corps of Engineers is resulting in a decline in salmon habitat in the Lower Green River sub-watershed.

**Three-Year Watershed Implementation Priorities - Puget Sound Salmon Recovery Plan
 WRIA 9 Habitat Work Schedule for Green/Duwamish and Central Puget Sound Watershed**

Project Name	Priority Tier	Total cost of first three years/phases	Local Share	SRFB/PSAR	Source of Funds	Primary Limiting Factors	Habitat Type	Activity Type	Primary Species	Secondary Species	2012		2013		2014		Likely end date	
											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost		
Capital Projects																		
Duwamish Subwatershed: Enlarge Duwamish estuarine transition zone habitat by expanding shallow water and slow water areas, and expand/enhance the estuary, particularly vegetated shallow subtidal and intertidal habitats and brackish marshes. VSP parameters for this subwatershed focus on productivity.																		
North Wind's Weir (Project, DUW-10) COMPLETED!	1	\$3,200,000	\$1,974,000	\$950,000 (2007)	King County \$325,000; US ACOE \$1,600,000; KCD \$325,000	Reduced habitat capacity. Competition with Hatchery origin juveniles.	Transitions zone estuary.	Shallow water habitat restoration.	Chinook	Steelhead, Bull trout, Orca	Monitoring	\$20,000	Monitoring	\$20,000	Monitoring	\$20,000	2014	
Riverbend Hill (Project DUW-6)	1	Habitat project costs to be determined		Unknown at this time	CFT (2008, submitted)	Reduced habitat capacity. Competition with Hatchery origin juveniles.	Transitions zone estuary.	Shallow water habitat restoration.	Chinook	Steelhead, Bull Trout, Orca	Design, engineering.		Permitting		Construction		unknown	
Duwamish Gardens Shallow Water Habitat Creation at RM 7.0 Project DUW-7) Acquisition Completed!	1	\$2,846,000	\$1,000,000	\$1,500,000		Reduced habitat capacity. Competition with Hatchery origin juveniles.	Transitions zone estuary.	Shallow water habitat restoration.	Chinook	Steelhead, Bull trout, Orca								
Duwamish Gardens Shallow Water Habitat Creation at RM 7.0 Project DUW-7) Restoration in design phase	1	\$3,300,000	\$150,000		SRFB 2010 \$197299; KCD \$150,000 (2010),	Reduced habitat capacity. Competition with Hatchery origin juveniles.	Transitions zone estuary.	Shallow water habitat restoration.	Chinook	Steelhead, Bull trout, Orca	Permitting	funded through 2010 grant	Construction	\$3,000,000	Construction	Revegetation	(included in 2012 grants)	
Duwamish and Newaukum Riparian Revegetation(Program WW-5)	1	\$250,000	\$250,000	\$0	\$200,000; SWM \$50,000	Loss of Habitat	Riparian	Riparian	Chinook	Steelhead	Construction (revegetation)	\$200,000	Construction (revegetation)	\$0	Monitoring			
Riverton Creek Flapgate Removal and Restoration - in feasibility phase	1	\$50,000	\$7,500	\$42,500	Tukwila \$7500	Reduced habitat capacity. Competition with Hatchery origin juveniles.	Transitions zone estuary.	Fish passage	Chinook	Coho	Design, engineering.	\$300,000	Construction	\$750,000	Monitoring/ Adaptive Management	\$100,000	2013	
Subtotals		\$9,646,000	\$3,381,500									\$20,000		\$20,000		\$20,000		
Lower Green River Subwatershed: Protect/restore refuge, habitat complexity and connectivity for juvenile salmon over range of flow conditions and variety of locations. VSP parameters for this subwatershed focus on productivity.																		
Lower Green Levee Setback/Upper Green River Forest Road Restoration Study	1	\$1,000,000	amount unknown - seeking funding at this time			Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	unknown		unknown		unknown			

CAVEAT: Subwatersheds listed in order of priority. Projects prioritized 1 through 3.

Project Name	Priority Tier	Total cost of first three years/phases	Local Share	SRFB/PSAR	Source of Funds	Primary Limiting Factors	Habitat Type	Activity Type	Primary Species	Secondary Species	2012		2013		2014		Likely end date	
											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost		
Capital Projects																		
Riverview Park Restoration (Project LG-7) Funding secured, construction planned for late 2011 or 2012	1	\$3,500,000	KCD \$40,000 (2006) PENDING: \$50,000, PENDING: Kent \$617,000	\$150,000 (2006); 500,000 (2009);	ACOE (\$2,000,000) KCD (\$500,000), Kent	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	construction	Funded	Monitoring/ Adaptive Management	\$20,000	Monitoring & Adaptive Management	\$20,000	2015	
Riverside Estates Levee Setback Project (LG-1)	1	\$3,038,983	\$3,038,983	\$0	KCFCZD	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Construciton	\$290,268	Construction	\$447,637	Construction	\$2,301,078	2011	
Teufel/Rosso Nursery Off-Channel Rehabilitation and Riparian Restoration Between RM 20.8 and 20 (LG-9) - ACQUISITION	1	\$3,500,000	KCFCZD, CFT/Parks Levee, WWRP,		KCFCZD	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream		Chinook	Steelhead, Bull Trout,Orca								
Teufel/Rosso Nursery Off-Channel Rehabilitation and Riparian Restoration Between RM 20.8 and 20 (LG-9) - RESTORATION	1	\$2,500,000	KCFCZD, King Conservation District		KCFCZD	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream		Chinook	Steelhead, Bull Trout,Orca	Design	\$300,000	Design and permitting	\$300,000	Construction	\$2,000,000	2013	
Downey Farmstead Restoration Project (formerly Lower Green River Acquisition) (Project LG-7) ACQUISITION	1	\$1,205,085	\$230,000	\$975,085 (2003)	Kent \$180,000; King County \$25,000; Green River Flood Control Zone District \$25,000	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca								
Lower Green Acquisition (Downey Farmstead) (Project LG-7)- DESIGN	1	\$5,000,000	\$250,000	\$4,750,000	Green River Flood Control District, King Conservation District, City of Kent, King County	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Final design and permitting				Construction	\$4,750,000		

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											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost		
Capital Projects																		

Desimone Levee Phases 1-4 (Project LG-13)	1	\$2,844,256			KCFCZD	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Design	\$80,607	Engineering, design, permitting.	\$898,673	Construction	\$1,864,976	2011	
Mill Creek Floodplain Wetland and Off-Channel Habitat Rehabilitation (Project LG-7)	2	\$1,500,000	no match required	\$100,000 (2006), \$200,000 (proposed 2010)	APPROVED: CFT: \$100,000 (2005 or 2006); City of Kent: \$100,000 (2005 or 2006)	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Complete Design & Permitting	\$0			Construction	\$3,500,000	2014	
Mill Creek - Wetland 5K	2	\$3,500,000	\$1,210,000			Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Construction	\$700,000	Monitoring	\$20,000	Monitoring	\$200,000	2013	
Mainstem Maintenance (Project LG 10)	1	\$2,733,347			GRFCZD, KCD, Kent, ACOE	Altered stream flow, channel structure& complexity, riparian areas, LWD.	Intream	Instream flow	Chinook	Steelhead, Bull Trout,Orca	Design Restoration Construction, Permitting	\$150,000	Construction	\$1,075,211	Complete Construction	\$1,658,136	2012	
Subtotals		\$11,518,586	\$3,781,256	\$1,225,085								\$1,520,875		\$2,761,521		\$16,294,190		
Nearshore Subwatershed: Protect, restore, or rehabilitate: sediment transport processes by reconnecting sediment sources and removing shoreline armoring; pocket estuaries, lagoons, and spits; and sediment quality, particularly in Elliott Bay. VSP parameters for this subwatershed focus on productivity.																		
Pier 90 Shallow Water Habitat Rehabilitation (NS-1)	1	\$2,500,000				Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design	\$500,000	Design and permitting	\$750,000	Construction	1,250,000	2015	

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											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost	
Capital Projects																	
Myrtle Edwards Park Small Pocket Beaches/Shallow Water Habitat Rehabilitation (NS-2)	1	\$6,000,000				Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design	\$500,000	Design and permitting	\$750,000	Construction	\$4,000,000	2015
Elliott Bay Shoreline Enhancements(Project NS-4)	1	\$56,000,000	unknown	unknown	unknown	Loss of habitat	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish							
Beaconsfield-On-The-Sound (project NS-11)	1	\$500,000	\$70,500	\$50,873 (2005-2006); \$100,000 (2006), \$380,739 (2007)	Cascade Land Conservancy \$2,977 (2005), KCD \$64,500 (2006); Normandy Park \$6,000 (2005), CFT (2008 submitted)	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design	\$100,000	Acquisition	\$150,000	Construction	\$250,000	
Piner Point Restoration Bulkhead Removal (Project NS-17) - Restoration	1	\$243,894	\$243,894	0	King Conservation District \$180,000 (2010) and King County (63,894)	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish							
Dockton Heights- Restoration	3	\$490,000	490,000	0	Dalco Oil Spill Mitigation Funding	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish	Design		Construction		Construction		
Maury Island Gravel Pit Acquisition (NS-17) - completed!	1	\$39,000,000	19,000,000	0	\$19,000,000 Conservation Futures, \$18,000,000 WA ASARCO settlement, \$2,000,000 private donors	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish							
Maury Island Fill Removal (NS-20)	2	\$280,000	80,000		\$80,000 SWM	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish		Design and permitting	\$80,000	Construction	\$200,000	2016	
Burien Seahurst Park Shoreline Restoration, Phase II (Project NS-5) - proposed for construction in 2011, funding secured	1	\$5,675,000	\$4,225,000	\$750,000 (2010)	KCD (\$510,000), ESRP (\$700,000), SRFB 2009 (\$750,000), USACE (\$3715,000)	Loss of habitat,	Nearshore beach.	Nearshore.	Chinook	Orca, forage fish	Construction	\$5,675,000	Construction		Monitoring	\$100,000	Construction complete in 2012, monitoring complete in 2017

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											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost	
Capital Projects																	
Dockton Road Removal and Feeder Bluff Restoration on Vashon Island (Project NS-19)	2	\$17,000,000				Loss of habitat,	Nearshore embayment.	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design						
Ellisport Creek Fish Passage Improvements on Vashon Island (projct NS-9)	2	Acquisition \$20,000 Cleanup \$500,000 Culvert replacement \$500,000				Altered stream flow.	Instream, riparian.	Fish passage.	Chinook	Orca, forage fish	Acquisition	\$20,000	Cleanup	\$500,000	Culvert Removal	\$500,000	2011
Point Robinson	2	\$450,000	\$150,000	\$300,000	King County SWM (\$150,000)	Lost of habitat	Nearshore saltmarsh	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design	\$40,000	Design and permitting	\$110,000	Constuction	\$300,000	2017
Cove Creek (Project NS-7) -	1	\$510,000	\$100,000	\$410,000	King County SWM (\$100,000)	Loss of habitat	Nearshore estuary	Nearshore.	Chinook	Orca, forage fish	Feasibility and Design	\$100,000	Construction	\$410,000	Monitoring	\$20,000	2017
Raab's Lagoon Restoration	1	\$100,000	\$1,000,000	\$0	King County SWM	Loss of habitat	Nearshore estuary	Nearshore.	Chinook	Orca, forage fish	Construction (revegetation 2011 and 2012)	\$100,000	Monitoring and Maintenance		Monitoring and Maintenance		
Cross Landing - Restoration (NS-17)	1	\$400,000	\$400,000	\$0	King County SWM (proposed)	Loss of habitat	Nearshore estuary	Nearshore.	Chinook	Orca, forage fish							
Maury Island Revegetation	2	\$500,000			King County SWM (\$10,000)	Loss of habitat	Nearshore estuary and riparian	Nearshore.	Chinook	Orca, forage fish	Construction (revegetation 2011 and 2012)	\$30,000	Construction (revegetation)	\$40,000	Construction (revegetation)	\$100,000	
Evaluate How to Improve Habitat Value of Raab's Lagoon/Pocket Estuary on Maury Island (Project NS-14)	3	\$100,000				Loss of habitat,	Nearshore embayment.	Nearshore.	Chinook	Orca, forage fish	Feasibility, Technical Design						

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											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost		
Capital Projects																		
Marine Nearshore Acquisition Projects																		
Functioning Nearshore Habitat Protection on Vashon/Maury Island-Dockton (Project NS-17)	2	Adequate funding secured			Conservation Futures, NOAA	Loss of habitat,	Nearshore beach.	Land acquired	Chinook	Orca, forage fish	Acquisition					Weed removal and revegetation	COST	2008
Functioning Nearshore Habitat Protection - South Shoreline (Project NS -11)	1	\$7,000,000	\$2,500,000			Loss of habitat,	Nearshore beach.	Acquisition	Chinook	Orca, forage fish	Feasibility	\$125,000	Acquisition	\$2,000,000	Acquisition	\$4,500,000		2014
Functioning Nearshore Habitat Protection on Vashon/Maury Island-Inspiration Pt. (Project NS-17)	2	\$500,000			Conservation Futures, NOAA	Loss of habitat,	Nearshore beach.		Chinook	Orca, forage fish	Acquisition							2008
Functioning Nearshore Habitat Protection on Vashon/Maury Island-Neill Pt. (Project NS-17)	2	\$500,000			Conservation Futures, NOAA	Loss of habitat	Nearshore beach.	Land acquired	Chinook	Orca, forage fish	Acquisition							
Functioning Nearshore Habitat Protection on Vashon/Maury Island-Rabb's Lagoon (Project NS-17)	3	\$100,000	unknown	unknown	Conservation Futures, NOAA	Loss of habitat	Nearshore beach.	Land acquired	Chinook	Orca, forage fish	Acquisition							
Functioning Nearshore Habitat Protection on Vashon/Maury Island-Piner Pt. (Project NS-17) Acquisition Completed!	2				SRFB	Loss of habitat	Nearshore beach.	Land acquired	Chinook	Orca, forage fish	Acquisition							
Functioning Nearshore Habitat Protection on Vashon/Maury Island-NorthIlla (Project NS-17)	3	Adequate funding secured			Conservation Futures, NOAA	Loss of habitat	Nearshore beach.	Land acquired	Chinook	Orca, forage fish	Acquisition							
Functioning Nearshore Habitat Protection on Vashon/Maury Island- Pt. Hever (Project NS-17)	1	\$13,000,000	\$2,450,000	\$360,000	KC SWM; CFT (2008, submitted); RCO ALEA (2008 , 2010 submitted; KC Park Levy (2008, 2010 submitted)	Loss of habitat,	Nearshore beach.	Land acquired	Chinook	Orca	Acquisition	\$1,500,000	Acquisition	\$1,500,000	Acquisition	\$1,500,000		
Cross Landing - Acquisition (NS-17)	1	\$800,000	\$800,000	\$0	Conservation Futures and Parks Levy	Loss of habitat,	Nearshore beach.	Land acquired	Chinook	Orca					Acquisition	\$1,000,000		
Subtotals		\$4,636,000	\$220,500	\$531,612								\$8,690,000		\$2,790,000		\$6,720,000		
Middle Green River Subwatershed: Protect/restore habitat that provides refuge and habitat complexity for juvenile salmon over a range of flow conditions and a variety of locations; enhance natural sediment recruitment by reconnecting sediment sources to river; protect and restore spawning and rearing habitat in lower Newaukum and Soos Creeks; maintain regional groundwater recharge and base flows to mainstem Green River.																		

CAVEAT: Subwatersheds listed in order of priority. Projects prioritized 1 through 3.

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											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost		
Capital Projects																		
Middle Green River Reach (Projects MG 12, MG-13, MG-14, MG-15, MG-16)	1																	
Porter Levee Setback and Floodplain Reconnection (Project MG-17)		\$1,500,000			\$1,000,000 KCD; \$500,000 SWM	Loss of Habitat	Floodplain, riparian	Riparian, intream flow	Chinook	Steelhead	Design & Permitting	\$250,000	Construction	\$1,000,000	Construction	\$250,000	2014	
Newaukum Creek Mouth Restoration Between Creek Miles 0.0 and 4.3 (Project MG-8) - Completed!	1	\$1,175,000		\$788,581 (2004)	King County, ACOE	Riparian areas and LWD recruitment	Intream, riparian	Riparian, intream flow	Chinook	Steelhead, bull trout	Design & Permitting	\$100,000	Construction	\$1,075,000	Monitoring/Adaptive Management			
Newaukum Creek Restoration Between Creek Miles 0.0 and 14.3 - Both Banks (Project MG-6)		\$300,000			\$200,000 KCD; \$100,000 SWM	Loss of Habitat	Riparian	Riparian, intream flow	Chinook	Steelhead	Construction	\$100,000	Construction	\$100,000	Construction	\$100,000	Ongoing	
Duwamish and Newaukum Riparian Revegetation(Program WW-5)		\$200,000			\$200,000; SWM \$50,000	Loss of Habitat	Riparian	Riparian	Chinook	Steelhead	Construction	\$150,000	Construction	\$150,000	Construction	\$150,000	Ongoing	
Setback and Removal of Pautzke Levees to Reconnect the Floodplain and Allow Channel Migration near RM 32(Project MG-18) Completed!	1	\$1,400,000		\$675,900 (2005-2006)	Green River Flood Control Zone District \$90,000; City of Auburn \$33,000	Channel structure/complexity	Intream, riparian	Riparian, intream flow	Chinook	Steelhead, bull trout	Construction	\$1,225,000	Monitoring/Adaptive Management	\$75,000	Monitoring/Adaptive Management	\$75,000	2008	
Setback and Removal of Fenster Levees _Phase 2 to Reconnect the Floodplain and Allow Channel Migration near RM 32(Project MG-18) Construction planned for 2011/2012	1	\$600,000 - \$800,000		\$250,000 (2007)		Channel structure/complexity	Intream, riparian	Riparian, intream flow	Chinook	Steelhead, bull trout			Design & Permitting	\$150,000	Construction	\$650,000	2010	
Setback and Removal of Fenster Levees _Phase 1 to Reconnect the Floodplain and Allow Channel Migration near RM 32 (Project MG-18) Construction completed!	1	\$3,500,000				Channel structure/complexity	Intream, riparian	Riparian, intream flow	Chinook	Steelhead, bull trout			Design & Permitting	\$100,000	Construction	\$3,400,000		
Big Spring Creek Acquisition (Project MG-7) - Completed	1	\$2,115,000				Stream flow patterns. High H2O temperature.	Intream, riparian	Water quality	Chinook	Coho								

CAVEAT: Subwatersheds listed in order of priority. Projects prioritized 1 through 3.

Project Name	Priority Tier	Total cost of first three years/phases	Local Share	SRFB/PSAR	Source of Funds	Primary Limiting Factors	Habitat Type	Activity Type	Primary Species	Secondary Species	2012		2013		2014		Likely end date
											Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost	
Capital Projects																	
Big Spring Creek Restoration (Project MG-7)	1	\$4,079,728	\$4,019,728	\$60,000	KCD:	Stream flow patterns. High H2O temperature.	Intream, riparian	Water quality	Chinook	Coho	Construction	\$1,973,000	Construction	\$785,000	Construction	\$285,000	2015
Subtotals		\$20,520,000															
Totals		\$39,924,586															
Non Capital Programs-Not Prioritized																	
Lead entity coordination		\$225,000									Staffing (1 FTE)	\$75,000	Staffing (1 FTE)	\$75,000	Staffing (1 FTE)	\$75,000	Ongoing
Adaptive management and monitoring		\$600,000									Staffing (3 FTEs)	\$200,000	Staffing (3 FTEs)	\$200,000	Staffing (3 FTEs)	\$200,000	Ongoing
Nearshore Habitat Workshop		\$35,000															
Seahurst Environmental Learning Center (annual basis)		\$30,000															
Create incentives Program to Remove Failing Septic Systems on Vashon/Maury Island																	
Project Management and Public Outreach																	
Stewardship & Educational Outreach																	
Water Conservation Incentive Programs																	